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REF ID: A66757

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EF5
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FILE

PRIORITY

1

TOP SECRET 220531Z

CORONA "L"

25X1

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1963 FEB 22 06 04Z

1. [] REQUESTS FOLLOWING ALIGNMENT CALIBRATIONS FOR EACH L INSTRUMENT.

A. ALIGNMENT AND DEVIATION OF THE PAN CAMERA AXIS IN RELATIONSHIP TO THE VEHICLE AXIS IN THE X, Y, AND Z PLANES.

B. ALIGNMENT AND DEVIATION OF THE ROLL JOINT AXIS IN REFERENCE TO THE PAN CAMERA OPTICAL AXIS.

C. ALIGNMENT AND DEVIATION OF THE MIRROR PLANE SURFACE IN RELATION TO THE PAN CAMERA OPTICAL AXIS IN THE X Y Z PLANES.

D. THE ALIGNMENT AND DEVIATION OF THE S/I UNIT IN RELATIONSHIP TO THE PAN CAMERA OPTICAL AXIS IN THE X Y Z PLANES AND ALSO THE KNEE ANGLE OF THE S/I UNIT.

E. THE HORIZON SENSOR ALIGNMENTS TO THE VEHICLE AXIS OR TO THE PAN CAMERA OPTICAL AXIS IN ALL THREE PLANES.

25X1

Declassification Review by NGA/DoD

GROUP 1
Excluded from automatic
downgrading and
declassification

TOP SECRET

F. ALIGNMENT OF THE MIRROR STEREO ROTATIONAL AXIS IN REFERENCE TO THE PAN CAMERA OPTICAL AXIS AND THE AXIS OF THE INDEX CAMERA.

G. ACCURACY OF THE ROLL JOINT AND REPEATABILITY OF THE ROLL ANGLE.

2. SINCE MOST MENSURATION AND ATTITUDE DETERMINATIONS WILL BE MADE FROM THE PAN CAMERA OPTICAL AXIS AND ITS RELATIONSHIPS TO THE S/I UNIT AND THE MIRROR AXIS, IT IS SUGGESTED THAT THE GREATEST ACCURACY BE MAINTAINED IN THESE ALIGNMENTS.

3. DEVIATIONS OF CALIBRATED ANGLES FROM DESIGN IS NOT CRITICAL PROVIDED DEVIATION IS KNOWN. CALIBRATION OF ALL ANGLES SHOULD BE ACCURATE TO WITHIN LESS THAN 1 MIN. OF ARC.

4. NO LIMITS ARE SET REGARDING DEVIATION BETWEEN CALIBRATED AND OPERATING VALUES. IN ORDER TO PROVIDE ANSWERS TO SE REQUESTS FOR ATTITUDE DATA AND RATES, REQUIRES THIS CALIBRATED DATA OF PRE-FLIGHT CONDITION IN ORDER TO ANALYZE POST-FLIGHT READOUT IN ATTEMPT TO DETERMINE EXTENT OF DEVIATIONS AND ESTABLISH CONFIDENCE LEVEL FOR FUTURE MISSIONS.

25X1

T O P S E C R E T

CFN 0539

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